

a clock generating circuit for generating a clock signal synchronized with said program clock reference extracted by said extracting circuit;

a time-stamp generating circuit for generating a time stamp in synchronization with said clock signal generated by said clock generating means;

a time-stamp continuity circuit for generating information representing continuity of time stamps; and

a discontinuity indicator generating circuit for generating a discontinuity indicator to indicate that pieces of the time stamp counter are discontinuous.

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**REMARKS**

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 USC §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

Claims 2, 3, 16, and 17 and amended claims 1, 4, 5, and 15 are pending in this application.

At paragraph 1 of the outstanding Office Action of May 31, 2002, the Examiner has objected to the title of the invention as not being descriptive. A new title clearly indicative of the invention to which the claims are directed to has been respectfully submitted. Applicant respectfully traverses the objection.

At paragraph 2 of the outstanding Office Action of May 31, 2002, the Examiner has objected to the abstract of the invention because it includes legal phraseology. A new

abstract excluding the legal phraseology has been respectfully submitted. Applicant respectfully traverses the objection.

At paragraph 3 of the outstanding Office Action of May 31, 2002, the Examiner has approved the proposed drawing correction filed on March 7, 2002. Applicant submits that corrected drawings were submitted with proposed drawing correction filed on March 7, 2002. Applicant will submit corrected formal drawings upon allowance of the case.

At paragraph 4 of the outstanding Office Action of May 31, 2002, the Examiner requested that the status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. The status of the nonprovisional parent application has been respectfully submitted.

At paragraph 6 of the outstanding Office Action of May 31, 2002, the Examiner has rejected claims 1, 4, 5, and 15 under 35 U.S.C. §102(b) as being anticipated by Adachi et al. Applicant respectfully traverses the rejection.

Amended independent claim 1 recites in part: “An information outputting apparatus comprising: an extracting means for extracting a program clock reference and a transport packet from an input stream...for generating information representing continuity of time stamps and **a discontinuity indicator generating means for generating a discontinuity indicator to indicate that pieces of the time stamp counter are discontinuous.**” (Underlining and bold added for emphasis.)

It is respectfully submitted that Adachi as applied by the Examiner (hereinafter “Adachi”) does not disclose a discontinuity indicator generating means. In other words, the object of the invention of Adachi is comprised of time code converting means for converting a first time code into a second time code (column 3, lines 50-67). That is, Adachi appears to

specifically disclose time code converting mechanisms, which involve adding phase differences and phase synchronization. Indeed, Adachi is concerned only with time code conversion and not the indicating of a discontinuity.

Applicant submits that Adachi does not disclose a “discontinuity indicator generating means for generating a discontinuity indicator to indicate that pieces of the time stamp counter are discontinuous,” as in amended independent claim 1. Therefore, amended claim 1 is distinguishable from Adachi. For similar reasons, it is also believed that independent claims 4, 5, and 15 are also distinguishable from Adachi.

At paragraph 8 of the outstanding Office Action of May 31, 2002, the Examiner has rejected claims 1, 3-5, 15 and 17 under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted prior art in view of Menezes. Applicant respectfully traverses the rejection.

It is respectfully submitted that neither the Applicant's admitted prior art (hereinafter “AAPR”) nor Menezes as applied by the Examiner (hereinafter “Menezes”) appear to disclose a discontinuity indicator generating means. Furthermore, Menezes appears to merely disclose the detection of the location and magnitude of the discontinuity, which enables accurate calculation of the distance between two time code addresses. In other words, a subtraction is performed between the current time code address and the counter tape address...so as to derive a time code address shift (column 4, lines 56-68). Consequently, while Menezes determines a time code discontinuity, no discontinuity indicator is identified in the data.

Applicant submits that neither AAPR nor Menezes disclose a “discontinuity indicator generating means for generating a discontinuity indicator to indicate that pieces of the time stamp counter are discontinuous,” as in amended independent claim 1. Therefore, amended claim 1 is distinguishable from the applied combination of AAPR and Menezes. For similar

reasons, it is also believed independent claims 4, 5, and 15 are also distinguishable from the applied combination of AAPR and Menezes.

Claims 3 and 17 are dependent from one of claims 1 and 15, and, due to such dependency, are believed to be distinguishable from the applied combination of AAPR and Menezes.

At paragraph 9 of the outstanding Office Action of May 31, 2002, the Examiner has rejected claims 1, 2, 4, 5, 15, and 16 under 35 U.S.C. §103(a) as being unpatentable over AAPR in view of Larson. Applicant respectfully traverses the rejection.

It is respectfully submitted that neither AAPR nor Larson as applied by the Examiner (hereinafter "Larson") disclose a discontinuity indicator generating means. Furthermore, Larson's invention appears to merely calculate how long the transit delay is by utilizing time-stamps and comparing the calculated delay against the maximum acceptable delay. Consequently, while Larson determines the transit delay between two time signals, no discontinuity indicator is identified in the data.

Applicant submits that neither AAPR nor Larson disclose a "discontinuity indicator generating means for generating a discontinuity indicator to indicate that pieces of the time stamp counter are discontinuous," as in amended independent claim 1. Therefore, amended claim 1 is distinguishable from the applied combination of AAPR and Larson. For similar reasons, it is also believed independent claims 4, 5, and 15 are also distinguishable from the applied combination of AAPR and Larson.

Claims 2 and 16 are dependent from one of claims 1 and 15, and, due to such dependency, are believed to be distinguishable from the applied combination of AAPR and Larson.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

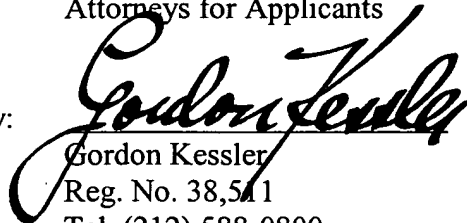
It is to be appreciated that the foregoing comments concerning the disclosures in the cited prior art represent the present opinions of the Applicant's undersigned attorney and, in the event, that the Examiner disagrees with any such opinions, it is requested that the Examiner indicate where, in the reference, there is the basis for a contrary view.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable over the prior art, and early and favorable consideration thereof is solicited.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

Respectfully submitted,  
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**Version with markings to show changes made**

**IN THE TITLE**

Please amend the title by rewriting the same to the following:

Information Outputting Apparatus and [Information Outputting] Method, and  
Presentation Medium for Digital Television Broadcast Systems

**IN THE ABSTRACT**

Please amend the abstract by rewriting the same to the following:

Disclosed are an information outputting apparatus, an information outputting method and a presentation medium, wherein the information outputting apparatus having an extracting [means] device for extracting a program clock reference and a transport packet from an input stream, a clock generating [means] device for generating a clock signal synchronized with the program clock reference extracted by the extracting [means] device, a time stamp generating [means] device for generating a time stamp in synchronization with the clock signal generated by the clock generating [means] device, and an information generating [means] device for generating information representing continuity of time stamps. As a result, a stream can be played back correctly and continuously even if discontinuity of time stamps exists.

**IN THE SPECIFICATION**

At page 1, line 3, after the title, please insert the following:

-- **CROSS REFERENCE TO RELATED APPLICATIONS**

This application is a Divisional of copending U.S. Serial No.09/313,100, filed on October 17, 2001, now U.S. Patent No. 6,404,711. --

**IN THE CLAIMS**

Please amend claims 1, 4, 5, and 15 by rewriting the same to the following:

1. (Amended) An information outputting apparatus comprising:  
an extracting means for extracting a program clock reference and a transport packet from an input stream;  
a clock generating means for generating a clock signal synchronized with said program clock reference extracted by said extracting means;  
a time-stamp generating means for generating a time stamp in synchronization with said clock signal generated by said clock generating means [and];  
an information generating means for generating information representing continuity of time stamps; and  
a discontinuity indicator generating means for indicating that pieces of the time stamp counter are discontinuous.

4. (Amended) An information outputting method comprising the steps of:

an extracting step for extracting a program clock reference and a transport packet from an input stream;

a clock generating step for generating a clock signal synchronized with said program clock reference extracted at said extracting step;

a time-stamp generating step for generating a time stamp in synchronization with said clock signal generated at said clock generating step [and];

an information generating step for generating information representing continuity of time stamps; and

a discontinuity indicator generating step for indicating that pieces of the time stamp counter are discontinuous.

5. (Amended) A presentation medium used for presenting a program executable by a computer to drive an information outputting apparatus to carry out the steps of:

an extracting step for extracting a program clock reference and a transport packet from an input stream;

a clock generating step for generating a clock signal synchronized with said program clock reference extracted at said extracting step;

a time-stamp generating step for generating a time stamp in synchronization with said clock signal generated at said clock generating step [and];

an information generating step for generating information representing continuity of time stamps; and



a discontinuity indicator generating step for indicating that pieces of the time stamp counter are discontinuous.

15. (Amended) An information outputting apparatus comprising:

an extracting circuit for extracting a program clock reference and a transport packet from an input stream;

a clock generating circuit for generating a clock signal synchronized with said program clock reference extracted by said extracting circuit;

a time-stamp generating circuit for generating a time stamp in synchronization with said clock signal generated by said clock generating means [and];

a time-stamp continuity circuit for generating information representing continuity of time stamps; and

a discontinuity indicator generating circuit for indicating that pieces of the time stamp counter are discontinuous.